

Arlington Conservation Commission
DRAFT Minutes
October 5, 2017

Mr. White called the meeting to order at 7:35 p.m. in the second floor conference room of the Town Hall Annex. Present were Commission Members David White, Mike Nonni, Curt Connors, Susan Chapnick, Cathy Garnett, and Conservation Agent, Lela Shepherd. Members Nathaniel Stevens and Chuck Tirone were absent. Also present were Todd Ravenelle, Ella Mattingly, Stephen Emsbo-Mattingly, Jay Tuli, Ed & Betsy Herman, and Brian Butler.

Administrative:

L. Shepherd announced that a pre-hearing site visit was requested by 11 Princeton Rd, whose Notice of Intent is scheduled to be heard by the Commission on 10/19/2017, and requested that the Commissioners make their availability to attend known by cob 10/12/2017.

Spy Pond Project

C. Garnett requested that the Commission and its Agent keep Parks and Recreation up to speed on new developments, to specifically include Jon Marshall and Don Vitters. L. Shepherd read through the updates received from Hilary Holmes, with contractor Hatch Chester. C. Garnett explained that Leslie Mayer, with Parks and Recreation, no longer approves of the plan because the Parks and Recreation Commission does not want more public access to the shoreline or holes made in the black metal fence. S. Chapnick inquired if Leslie Mayer was in attendance at any of the public meetings, and if she were aware of the process that developed where the public expressed interest in more public access. S. Chapnick suggested that N. Stevens and C. Tirone set a meeting with Jon Marshall and Don Vitters. L. Shepherd stated that she would set it up.

Ch.91 Overview

L. Shepherd prepared a handout summarizing the General License self-certification process and gave a synopsis of the meeting she attended with MSMCP. S. Chapnick requested to invite the ARB to the Conservation Commission meeting on 11/2/2017 to discuss and gain a better understanding of the jurisdiction and procedural actions for which each regulatory body will be responsible for.

Building Department Directory of flood properties

L. Shepherd stated that Inspectional Services Director, Mike Byrne, has requested a directory of properties under Conservation Commission jurisdiction that are within the floodplain. It was recalled that C. Tirone had previously filled this request, and Mr. Byrne should be in receipt of this information, resolving this request. L. Shepherd stated she would follow up with Inspectional Services.

General Discussion:

S. Chapnick commented that she saw a tree warden on No-Name Brook marking dead trees for removal in the next couple of weeks. S. Chapnick requested that we ask that they advise the Conservation Commission about their actions prior to continuing their work. D. White stated we should send the tree warden our tree map, showing the Conservation Commission resource areas, and that Nathaniel Stevens should make this request. The tree warden was located between Golds Gym and where the brook is daylighted.

Ella Mattingly MIT Lincoln Labs Venture Crew 1775 - Mapping water bodies in the watershed as a global warming preparedness project, presentation of results:

Ms. Mattingly began the presentation by explaining the effect global warming has had on shorelines and coastal areas as well as inlands, and how drones can be used to take readings and measurements to monitor habitat and bathymetry using structure from motion software. Drones can measure depth of water, locate submerged objects, take water temperature, estimate the number of fish present in a waterbody, determine the concentrations of some pollutants, measure the speed of water flow, and monitor invasive species.

S. Chapnick asked how to detect the difference between invasive and native vegetation using this

technique.

Ms. Mattingly responded that the type vegetation cannot be distinguished but the technique can detect general vegetation and therefore track invasive species if they are identified as such in the water body. She then proceeded to describe the advantages for data collection, to include: lower costs, programmable paths, and accessing remote areas. She then gave a brief history of the Arlington Reservoir, stating that the deepest point of the Reservoir is 12 feet, and the sides act as a "tub". For every amount of water added, the more surface area is being added as well, because it has steep banks.

D. White suggested superimposing the old depth map on the Arlington website with the map Ella created using the Z-Boat.

D. White asked how fine one can do measurements using a drone.

Ms. Mattingly responded that the Z-Boat can take more than 2,000 readings every inch of elevation. The glacial tilt map showed that vegetation doesn't take root in the glacial tilt. At highest elevation (when the dam is up) the flood storage capacity is 35,000 cubic meters, and in the winter when the dam is down the flood storage capacity is roughly 190,000 cubic meters. This indicated that the dam should be put down when it gets cold to increase the storage capacity. The Arlington Reservoir can store up to 69 million gallons of water and 2/3 is available for flood capacity when the dam is low.

Ms. Mattingly proceeded to give a history of Spy Pond, which has an average depth of about 12 feet, with a max depth of 36 feet. Her data indicated a submerged island east of Elizabeth Island, and determined that Spy Pond has a capacity of almost 2 million cubic meters, 10 times that of the Reservoir. She then moved on to describe the Sudbury River, which has an invasive species problem. Her crew was unable to track the growth of the invasive species because they didn't have access to the drones over the entire summer, but they can currently do weekly monitoring. Stephen Embso-Mattingly suggested that a stream gauge be mounted on the output of the Reservoir to monitor the Reservoir's water level on daily basis.

D. White stated that DPW manages the dam on the Reservoir and the Conservation Commission should reach out to see if this is possible.

S. Chapnick suggested that this technique may be relevant to Arlington Community Preparedness assessments.

Request for Determination- 48 Robin Hood Rd.

Brian Butler-Oxbow Associates

Jay Tuli-Owner

Proposal is to remove and replace the currently existing single family home. Thirteen feet of existing shed is currently within the 100 foot buffer zone. The stockpiling area will be 180 feet from the pond edge. Test pit showed no groundwater at 9 feet, so they do not believe construction will influence the groundwater.

Mr. Tuli requested that the Commission determine that this action will not significantly affect the wetlands, and make a negative impact finding.

S. Chapnick asked about erosion control.

D. White commented that their plan states hay bales but it should be corrected to straw bales.

Mr. Tuli stated they will correct this mistake and ensure feed hay is not purchased for erosion control.

C. Connors asked about wetlands flagged around the bank on the site plan.

Mr. Butler responded that there is a beachlet or an armored bank in that area.

S. Chapnick asked if debris would be removed off site.

Mr. Butler confirmed that this would happen.

C. Connors remembered from previous working sessions that the main concern was to flag the wetlands and not to disturb them.

C. Garnett stated that they had previously been concerned about where the flood zone was, but as it is outside that is no longer a concern.

D. White asked if the patio is made of pervious materials.

S Chapnick stated it is not a patio but a deck.

Mr. Tuli clarified that there is a deck and a patio and they are not concreting it, so it should be a semi-permeable material, to accommodate for stormwater infiltration, which currently doesn't exist.

C. Connors asked if the straw bales would be staked, Mr. Butler responded they would be.

C Connors made a motion for a positive/negative finding, M. Nonni seconded, no discussion, all in favor, motion passed.

L. Shepherd asked if conditions were required, the Commission responded that no inspection is required, only erosion control measures are required with staked straw bales.

L. Shepherd will complete WPA Form 2 and issue the positive/negative RDA to applicant.

Enforcement Action-104 Spy Pond Parkway

Ed Herman

Mr. Herman is requesting an after the fact permit for a 5'2" by 8 feet boat dock that bears on the shoreline, with no pilings, and is gravity supported. He was unaware that he needed a permit; it was put in over 10 years ago, and has not moved it since, except for a few years ago when there was a flood on Mother's Day. The Commission determined that more research is required of the bylaws and sought to confer with the chair, N. Stevens (not present), as to whether the standard licensing process would apply or if Mr. Herman could simply be approved.

Mr. Herman had made clear that he just wants to be cleared on the neighbor's retaining wall, which Mr. Herman states was installed by the neighbor at 114 Spy Pond Parkway, without a permit, and was constructed partially on Mr. Herman's land without his consent.

The Commission decided to separate the neighbor's retaining wall issue from Mr. Herman's boat ramp and the portion of the retaining wall on his land.

D. White made a motion to continue the issue of the neighbor's portion of the violating retaining wall, 114 Spy Pond Parkway, to the next meeting, this was seconded by M. Nonni, all in favor, motion passed.

C. Connors motioned to move the Herman issues (104 Spy Pond Parkway) to the 11/2 meeting, S. Chapnick seconded, all in favor, motion passed.

Request for Applicability- 10 Court Street

Todd Rabinoll, on behalf of USPS

Applicant is not proposing to increase the amount of the pavement, only wishing to regrade and resurface the entire parking lot, however, does not consider this a restoration project. The applicant stated that he is hoping that the Commission will determine the project is not applicable.

L. Shepherd referred to the wetlands map to show the jurisdictional location of the property to Mill Brook.

S. Chapnick declared it is outside of the Commissions jurisdiction and asked if an RDA is required for a

negative/negative under negative determination #1.

C. Connors motioned for a negative finding on the basis that jurisdiction was not found due to project location being outside of the 200 foot buffer, but clarifying that the negative jurisdiction finding is not in any way based on the legal argument of 310 CMR 10.02 (2)(B)(2) raised by the Applicant, with which the Commission disagrees and does not credit. The motion was seconded by S. Chapnick, all were in favor, the motion passed.

L. Shepherd will prepare a negative/negative RDA.

Arlington Land Trust letter regarding development adjacent to-Mt. Gilboa

S. Chapnick noted that this path issue had already been denied by the Historic Commission.

D. White acknowledged that if they build the house, the access path will be lost, although there are others. The property is privately owned. This was a point of discussion; and it was determined that no action by the Commission is warranted at this time.

Committee Business

D. White stated that the Reservoir Master Plan documents are all located online and that the Reservoir Committee's last meeting was successful and productive.

A brief update was given for McClellan Park: the contractor, Woods Hole Group, will generate a sampling and analysis plan and they are hoping to sample in November. They have also reached out to DEP to find out if iron flocculation is considered a determination for degradation of the ecology.

D. White motioned to close the hearing, C. Connors seconded, motion passed unanimously.

The meeting was adjourned at 10:03 pm.

Respectfully submitted,

Lela Shepherd
Environmental Planner/Conservation Agent